



PRELIMINARY

INNOVIZ360

The New Standard for 360° LiDAR Performance

SAMPLES AVAILABLE Q1, 2023

Innoviz360 sets a new standard for a high-performance 360° LiDAR for automotive and non-automotive applications. It features a revolutionary 360° scanning design with a pre-configured maximum 64° vertical FOV and ROI location. Its 300m detection range is ideal for autonomous vehicles, shuttles and non-automotive applications, including heavy machinery, smart cities, logistics, construction, and maritime.

Innoviz360 supports pre-configured functionality including FOV scanning configuration with Region of Interest (ROI), pixel summation, frame rate, and up to three reflections.








KEY PERFORMANCE METRICS

| | | | |
|--------------------------------------|-------------------------------------------------|-----------------------------------------|----------------------------------------|
| 0.3m-300m Detection Range | 0.05°x0.05° Maximum Angular Resolution (HxV) | 360°x64° Maximum Field of View (HxV) | 0.5-25FPS Pre-Configured Frame Rate |
| 300-1280 Scanning Lines per Frame | IP6K6K, IP6K9K, IP6K7 Ingress Protection | 115x65mm (Diameter x Height) | -40°C to 85°C Operating Temperature |

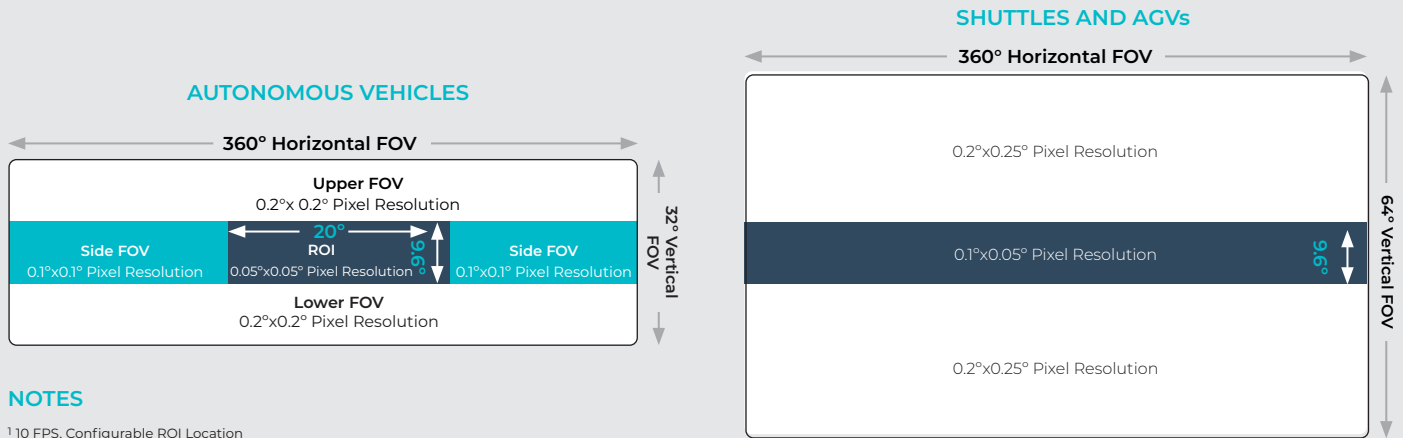
UNIQUE FEATURES

- Enhanced resolution and range
- FOV with configurable ROI location
- Up to 3 reflections
- Resilient to sunlight & weather conditions
- Pixel summation for extended range
- Ethernet/Automotive Ethernet interface

MARKET APPLICATIONS

| | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|  Autonomous Vehicles |  Robotaxis and Shuttles |  Trucking |
|  Heavy Machinery |  Smart Cities |  Logistics |
| | |  Construction |

SCANNING CONFIGURATION EXAMPLES¹



NOTES

¹ 10 FPS, Configurable ROI Location

SPECIFICATIONS

INTERFACES

| | |
|---------------------------|---------------------------------------------------------|
| Data, Command and Control | Ethernet (1000BASE-T)/Automotive Ethernet (1000BASE-T1) |
| Time Synchronization | PTP over Ethernet (1588V2/802.1AS) |

LASER

| | |
|---------------------|---------------------------------|
| Laser Product Class | Class 1, Eye-safe (IEC-60825-1) |
| Wavelength | 905nm |

OUTPUTS

| | |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Point Cloud Attributes | Per reflection: Distance, reflectivity, and confidence Per-pixel: Timestamp, number of reflections, blockage indication, and coordinates of pixel Per frame: Window blockage detection, frame sequence number |
| Point Cloud Reflections | Up to 3 |
| Pixel Latency ¹ | <10msec |
| Time Stamp | 10 µsec accuracy for every pixel |

NOTES

¹ From first laser pulse of the pixel until pixel data is sent over the data interface.

MECHANICAL/ELECTRICAL

| | | |
|-------------------|------------------------------|----------------|
| Power Consumption | 25W (typical) | |
| Operating Voltage | 6.5 to 32VDC | |
| Dimensions | 115x65mm (Diameter x Height) | |
| Weight | ~1kg | |
| Temperature | Operating | -40°C to 85°C |
| | Storage | -40°C to 105°C |
| Lifetime | 15 years or 300,000km | |